

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A lithographic apparatus comprising:
an illumination system constructed and arranged to provide a beam of radiation ~~on a flat article on an article support in a beam path of said beam of radiation;~~
an article support constructed and arranged to support a flat article in a beam path of the beam of radiation; and
an article handler provided in the article support, the article handler being constructed and arranged to move said article during placement of said article on, or removal of said article from said article support, said article handler comprising an electrode and a dielectric layer in order to form an electrostatic clamp to electrostatically clamp said article.
2. (Original) A lithographic apparatus according to claim 1, wherein said article handler comprises at least three mutually distanced contact members for contacting the article.
3. (Original) A lithographic apparatus according to claim 2, wherein the contact area of said contact members is less than about 80 mm².
4. (Original) A lithographic apparatus according to claim 1, wherein said apparatus further comprises a presence detector to detect a presence of said article through a measured capacity formed by said electrode, said dielectric layer, and said article to be handled.
5. (Original) A lithographic apparatus according to claim 1, wherein said dielectric layer is wear resistant.
6. (Original) A lithographic apparatus according to claim 5, wherein the dielectric layer is provided with protrusions to provide a gap between the dielectric layer and the article to be handled.

7. (Original) A lithographic apparatus according to claim 6, wherein said gap ranges between about 0.1 and about 5 microns.

8. (Original) A lithographic apparatus according to claim 1, wherein said dielectric layer comprises at least one of SiO₂ and SiN.

9. (Previously Presented) A lithographic apparatus according to claim 1, wherein said dielectric layer has a thickness of less than about 50 microns, and has a dielectric constant of greater than about 3.

10. (Original) A lithographic apparatus according to claim 9 wherein said electrostatic clamp is designed to provide a clamping pressure greater than about $1 \cdot 10^4$ Pa.

11. (Original) A lithographic apparatus according to claim 1, wherein said article handler comprises two electrodes.

12. (Original) A lithographic apparatus according to claim 11, wherein said electrodes are formed by an Si layer that is bonded on an isolator.

13. (Original) A lithographic apparatus according to claim 12, wherein said isolator comprises a substrate comprising an SiO₂ layer or a machined isolating substrate.

14. (Original) A lithographic apparatus according to claim 1, wherein said electrode comprises a metal pad bonded to said electrode in order to form a terminal for wiring said electrode.

15. (Original) A lithographic apparatus according to claim 14, wherein said metal pad is formed by an Al layer that is bonded to said electrode.

16. (Cancelled).

17. (Original) A lithographic apparatus according to claim 1, wherein said article support is a support to support a patterning structure, the patterning structure configured to impart the beam of radiation with a pattern in its cross-section.

18. (Original) A lithographic apparatus according to claim 1, wherein said article support is a substrate support for supporting a substrate to be patterned by a patterned beam of radiation onto a target portion of the substrate.

19. (Cancelled).

20. (Cancelled).

21. (Currently Amended) A device manufacturing method comprising:

providing a substrate;

handling said substrate ~~by~~ with an article handler provided in an article support, said article handler having with an electrostatic clamp;

detecting a presence of said substrate on said article support by detecting a capacity formed by said electrostatic clamp and said substrate;

providing a beam of radiation using an illumination system;

using a patterning structure to impart the projection beam with a pattern in its cross-section; and

projecting, after detecting the presence of said substrate, the patterned beam of radiation onto a target portion of the substrate.

22. (Currently Amended) A lithographic apparatus comprising:

an illumination system that provides a beam of radiation to an article;

a support that supports the article in the beam of radiation;

an article handler configured to move the article during placement of the article on, and removal of the article from, the support, the article handler being integrated with the support; and

an electrostatic clamp configured to clamp the article to the article handler, the electrostatic clamp comprising an electrode and a dielectric layer.

23. (Cancelled).

24. (Original) A lithographic apparatus according to claim 22, wherein the article comprises a wafer.